DERWENT-ACC-NO:

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TITLE:

Dual power system of 42v system vehicle

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PATENT-FAMILY:

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INT-CL (IPC): B60L001/00

ABSTRACTED-PUB-NO: KR2003050629A

BASIC-ABSTRACT:

 $\ensuremath{\mathsf{NOVELTY}}$ - A dual power system is provided to increase an engine efficiency and

to improve a continued ratio by supplying a 42V power to high-power parts and a

14V power to low-power parts.

DETAILED DESCRIPTION - An IGS has a starter function and generates a high

power, and a motor control unit(MCU) controls a generation amount and a starter

function. A 36V battery(BAT1) stores a power generated by a 42V IGS generation

system, and a battery management system(BMS) controls and manages the 36V

battery. A 42V water pump(W/PUMP) comprises a 42V motor which is driven by the



36V battery. A high-power apparatus comprises a 42V air conditioner compressor(A/C COMP), a 42V fuel pump(F/PUMP), a 42V radiator fan motor(R/FAN),

a 42V wiper(WIPER), a 42V condenser fan(C/FAN), and a 42V power window(P/WINDOW

 $\mbox{{\tt MOTOR}})\,.$ A bidirectional DC/DC converter(DC/DC) converts a drive voltage from

the 36V battery, and a battery(BAT2) charges a voltage from the bidirectional

DC/DC converter(DC/DC). A low-power apparatus is driven by a voltage from the battery(BAT2).

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: DUAL POWER SYSTEM SYSTEM VEHICLE

DERWENT-CLASS: Q14 X12 X21 X22

EPI-CODES: X12-J02; X21-A01D; X21-B01; X22-F03; X22-P04;

